Montana Department of Natural Resources and Conservation
Water Resources Division
Water Rights Bureau

ENVIRONMENTAL ASSESSMENT
For Routine Actions with Limited Environmental Impact

Part I. Proposed Action Description

1. Applicant/Contact name and address:

   Gary D & Sharon A Jacobsen Trust
   48520 Highway 200
   Ovando, Montana 59854

   Morgan Case, Trout Unlimited
   P.O. Box 412
   Helena, Montana 59624

2. Type of action: Applications to Change Water Right Nos. 76F 30151718 & 76F 30120623

3. Water source name: North Fork Blackfoot River, tributary to Blackfoot River in Powell County

4. Location affected by project: 0.7-mile reach of North Fork Blackfoot River beginning at the historical Jacobsen Ditch headgate in the NWSENW of Section 29, T15N R11W; Jacobsen Spring Creek, tributary to North Fork Blackfoot River, in the SWNWNW of Section 6, T14N R12W

5. Narrative summary of the proposed project, purpose, action to be taken, and benefits: On January 14, 2019, the Applicant submitted Application to Change Water Right No. 76F 30151718 to temporarily change the purpose and place of use of Statement of Claim No. 76F 10389-00 from irrigation to instream flow for the benefit of the fishery resource in the North Fork of the Blackfoot River for a period of 10 years. During the term of this temporary change a portion of the historical place of use will be retired and a flow rate and volume of 5.84 cubic feet per second (CFS) and 566.4 acre-feet (AF) will be left instream in the North Fork Blackfoot River in a 0.7-mile reach beginning at the Jacobsen Ditch headgate. The 49-day period of use for instream flow is July 23 to September 10. The project also includes a permanent change in point of diversion that is associated with Application No. 76F 30120623. After the permanent change the Applicant will cease diverting water from the North Fork Blackfoot River in to the Jacobsen Ditch and will instead begin diverting water from a pump in Jacobsen Spring Creek, tributary to the North Fork Blackfoot River, in the SWNWNW of Section 6, T14N R12W. Claim 76F 10390-00 is being permanently changed in a similar fashion in Change Application No. 76F 30120624. After these permanent changes a maximum of 1.78 CFS will be diverted into the same pump and pipeline system with both Claims 76F 10389-00 (1.58 CFS) and 76F 10390-00 (0.2 CFS). During the term of the temporary change a maximum of 110.5 acres will be irrigated with Claim 76F 10389-00. In the instance the proposed temporary change expires or is not renewed, a maximum flow rate and volume of 1.78 CFS and up to 420.1 AF will be diverted from Jacobsen Spring Creek to irrigate 193 acres with Claim 76F 10390-00 (0.2 CFS up to 47.6 AF for the irrigation of 30 acres) and 76F 10389-00 (1.58 CFS up to 372.5 AF for the irrigation of 163 acres). The period of diversion for irrigation is May 15 to September 10. The DNRC shall issue a water right change authorization if an applicant proves the criteria in §85-2-402, MCA are met.

6. Agencies consulted during preparation of the Environmental Assessment:

Montana Natural Heritage Program:	Species of Concern
Montana Dept. of Fish, Wildlife, & Parks:	2005 Dewatered Stream List
Montana Dept. of Environmental Quality:	303(d) list of impaired streams
Montana Dept. of Justice	Natural Resource Damages Program
USDA Natural Resources Conservation Service:	Web Soil Survey

Part II. Environmental Review

1. Environmental Impact Checklist:

PHYSICAL ENVIRONMENT

WATER QUANTITY, QUALITY AND DISTRIBUTION

Water quantity *- Assess whether the source of supply is identified as a chronically or periodically dewatered stream by DFWP. Assess whether the proposed use will worsen the already dewatered condition.*

The entire reach of the North Fork Blackfoot River proposed for instream flow enhancement is listed as chronically dewatered according to the Montana DFWP. The instream reach also lies at the lower end of a naturally losing reach which has been historically exacerbated by irrigation activities in this stream. Flow depletion is especially pronounced in late August and September when bull trout are migrating out from spawning redds high in the stream. In extreme low water years when late season flows drop below 10 CFS at Ryan Bridge, out-migrating fish have been stranded between pools between riffles.

Determination: No negative impact.

Water quality *- Assess whether the stream is listed as water quality impaired or threatened by DEQ, and whether the proposed project will affect water quality.*

The proposed project will not alter nor adversely affect water quality in the North Fork Blackfoot River. The purpose of this project is to reduce the extent of irrigation activity and irrigation water use and leave water instream for the benefit of the aquatic ecosystem. Streamflow augmentation resulting from this change in water use will help provide better habitat for critical aquatic species.

Determination: No negative impact.

Groundwater *- Assess if the proposed project impacts ground water quality or supply.*
If this is a groundwater appropriation, assess if it could impact adjacent surface water flows.

Determination: N/A as this change in water use does not involve groundwater.

DIVERSION WORKS - *Assess whether the means of diversion, construction and operation of the appropriation works of the proposed project will impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams, well construction.*

The Applicant proposes to permanently change the point of diversion of Claim 76F 10389-00 from the Jacobsen Ditch headgate in the NWSENW of Section 29, T15N R11W, to a pump site located in the SWNWNW of Section 6, T14N R12W, immediately adjacent to the proposed center pivot-irrigated place of use. The new irrigation system will consist of a pipeline that is 785 in length with a 10-inch diameter, and a single speed 25-horsepower pump motor with a maximum flow rate of 800 gallons per minute (GPM) (1.78 CFS). The system will also include a new center pivot sprinkler and a 1,620-foot, 4-inch diameter extension line to a traveling gun that will irrigate the northern portion of the post-change irrigation place of use. The Applicant provided pump specifications and power records that show the system capacity is limited to 800 GPM and that the system will be able to operate as proposed. There will be no damage to the creek resulting from the authorization of this change since installation of the new irrigation system was completed prior to submission of the change application.

Determination: No negative impact

UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

Endangered and threatened species *- Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants or aquatic species or any "species of special concern," or create a barrier to the migration or movement of fish or wildlife. For groundwater, assess whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or "species of special concern."*

The Montana Natural Heritage Program was consulted to determine if there are any threatened or endangered fish, wildlife, plants, aquatic species, or any "species of special concern" that could be impacted by the proposed project. This project includes a permanent change in the point of diversion from the historical ditch and headgate in the North Fork Blackfoot River to a new pump and pipeline in Jacobsen Spring Creek that will convey water to 110.5 acres with Claim 76F 10389-00. Water that will be appropriated instream in the North Fork Blackfoot River is made available from the temporary retirement of a portion of the historical place of use and reduced diverted volume. This project will not result in the loss or negative alteration of any wildlife habitat.

Determination: No negative impact.

Wetlands *- Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.*

Determination: Project does not negatively impact existing wetlands.

Ponds *- For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.*

Determination: No negative impact – project does not involve ponds.

GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE - *Assess whether there will be degradation of soil quality, alteration of soil stability, or moisture content. Assess whether the soils are heavy in salts that could cause saline seep.*

Determination: This proposed change will not result in any negative impact to surrounding soils.

VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS - *Assess impacts to existing vegetative cover. Assess whether the proposed project would result in the establishment or spread of noxious weeds.*

Installation of the pump and pipeline was completed prior to submission of this water right change application. This application will otherwise have no adverse impact to existing vegetative cover and will not result in the establishment or spread of noxious weeds.

Determination: No negative impact.

AIR QUALITY - *Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.*

There will be no source of pollution associated with the change in water use that will alter air quality.

Determination: No negative impact.

HISTORICAL AND ARCHEOLOGICAL SITES - *Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project if it is on State or Federal Lands. If it is not on State or Federal Lands simply state NA-project not located on State or Federal Lands.*

Determination: N/A – project not located on State or Federal Lands.

DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY - *Assess any other impacts on environmental resources of land, water and energy not already addressed.*

The proposed pump and pipeline are not expected to negatively impact surrounding environmental resources.

Determination: No negative impact.

HUMAN ENVIRONMENT

LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS - *Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.*

Determination: No negative impact.

ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES - *Assess whether the proposed project will impact access to or the quality of recreational and wilderness activities.*

Determination: No negative impact.

HUMAN HEALTH - *Assess whether the proposed project impacts on human health.*

Determination: No negative impact

PRIVATE PROPERTY - *Assess whether there are any government regulatory impacts on private property rights.*
Yes ___ No _X_ If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.

Determination: No negative impact.

OTHER HUMAN ENVIRONMENTAL ISSUES - *For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.*

Impacts on:

(a) *Cultural uniqueness and diversity?* None identified.

(*b)* *Local and state tax base and tax revenues?* None identified.

(c) *Existing land uses?* Irrigated footprint will be reduced – no negative impacts.

(*d)* *Quantity and distribution of employment?* None identified.

(e) *Distribution and density of population and housing?* None identified.

(f) *Demands for government services?* None identified.

(g) *Industrial and commercial activity?* None identified.

(h) *Utilities?* None identified.

(i) *Transportation?* None identified.

(j) *Safety?* None identified.

(k) *Other appropriate social and economic circumstances?* None identified.

2. Secondary and cumulative impacts on the physical environment and human population:

Secondary Impacts None identified.

Cumulative Impacts None identified.

3. Describe any mitigation/stipulation measures: None identified.

4. Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider: No reasonable alternatives were identified.

Part III. Conclusion

1. Preferred Alternative: None identified.

2 Comments and Responses

4. *Finding:*
Yes ___ No _X_ Based on the significance criteria evaluated in this EA, is an EIS required?

If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action:

An EIS is not the appropriate level of analysis for the proposed action because no significant negative impacts were identified.

Name of person(s) responsible for preparation of EA:

Name: Danika Holmes
Title: Hydrologist/Water Resource Specialist
Date: April 15, 20201